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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/521,522	03/08/2000	David H Cox	1331R	1086

7590

02/22/2002

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EXAMINER

NI, SUHAN

ART UNIT

PAPER NUMBER

2643

DATE MAILED: 02/22/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/521,522

Applicant(s)

COX ET AL

Examiner

Suhan Ni

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 December 2001.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) 1-5 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 6-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. This communication is responsive to the applicant's amendment dated 12/27/2001.
2. This application contains claims 1-5 drawn to an invention nonelected with traverse in Paper No. 5. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Drawings

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims.

Therefore, “a first flange and a second flange” must be clearly shown and properly numbered, or the feature(s) canceled from claims 9, 12-13, 25 and 28-29. No new matter should be entered.

Therefore, “an interior surface of the second layer defines a throat” must be clearly shown and properly numbered, or the feature(s) canceled from claims 9 and 28. No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Objections

4. Claim 12-13 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel

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the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

5. Claims 9, 12-13, 16, 23, 25 and 28-30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 9, 12-13, 25 and 28-29, the limitation of “a first flange and a second flange” is indefinite since it is not clearly defined and well described in the specification.

Regarding claims 9 and 28, the limitation of “an interior surface of the second layer defines a throat” is indefinite since it is not clearly described in the specification.

Regarding claim 16, the limitation of “a mineral-filled damping material” is indefinite since it is not clearly defined and well described in the specification.

Regarding claims 23 and 30, it recites the limitation "the collective of the margin" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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(e) The invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

6. Claims 6-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Ritto et al. (US-5,519,178).

Regarding claim 6, Ritto et al. disclose a loudspeaker component comprising: a first surface layer (120,122) of molding material made to have a predetermined boundary outline; a core layer (126) of sound-damping material made to have a predetermined outline smaller than that of said first layer so as to form a peripheral margin of molding material; and a second surface layer (130) of molding material, having an outline similar to that of said first layer and located in substantial registration therewith, bonded to said first layer in the peripheral margin so as to form a sealing core region containing said core layer (Figs. 2-3).

Regarding claim 7, Ritto et al. further disclose the loudspeaker component, wherein the molding material is a commercially available thermosetting resin (col. 4, lines 41-55) with fiberglass (col. 5, lines 40-43) reinforcement.

7. Claims 6 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Iwata et al. (US-4,807,294).

Regarding claim 6, Iwata et al. disclose a loudspeaker component comprising: a first surface layer (2) of molding material made to have a predetermined boundary outline; a core layer (3, 13) of sound-damping material (8) made to have a predetermined outline smaller than that of said first layer so as to form a peripheral margin of molding material; and a second surface layer (2) of molding material, having an outline similar to that of said first layer and located in substantial registration therewith, bonded to said first layer in the peripheral margin so as to form a sealing core region containing said core layer (Figs 1 and 3B).

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Regarding claim 8, Iwata et al. further disclose the loudspeaker component wherein said core material is selected from a group of sound-damping materials including a filled vinyl copolymer compound (col. 4, lines 24-25) and a filled silicon rubber compound (8).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Based on the best understanding of the claim language with regarding the 112, 2nd paragraph rejection as mentioned above in paragraph 5 of this office action, claims 9-11, 17, 19 and 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iwata et al. (US-4,807,294).

Regarding claim 9 and 25, Iwata et al. disclose a loudspeaker component comprising: a first surface layer (2); a second layer fixed to the first layer so as to defined a core (3) and a margin (1); and sound damping material disposed in the core (8), wherein the core is completely encased by the first layer and the second layer, both layers and sound damping material comprise a three-layer laminate as claimed. But Iwata et al. do not clearly teach a first flange and a second flange as claimed. Since Iwata et al. do clearly teach that the loudspeaker component can be provided for many supporting surfaces and utilized in many applications, such as a car (Fig. 5), it therefore would have been obvious to one skilled in the art at the time the invention was made to

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provide any mounting or engaging means, such as a plurality of flange for the loudspeaker component as an alternate choice, in order to utilize the loudspeaker component.

Regarding claims 10 and 26, Iwata et al. do not clearly teach that the core defines a trapezoid as claimed. Since Iwata et al. do not restrict the use of the loudspeaker component and clearly teach that the loudspeaker component can be provided for many supporting surfaces and utilized in many applications, such as a car (Fig. 5), it therefore would have been obvious to one skilled in the art at the time the invention was made to provide the loudspeaker component in any suitable shape with any desirable acoustic characteristics for different applications.

Regarding claim 11, Iwata et al. further disclose the loudspeaker component, wherein the margin is a solid structure (Fig. 5).

Regarding claim 17 and 19, Iwata et al. further disclose the loudspeaker component, wherein the sound damping material comprises a solid material (8) as claimed.

9. Based on the best understanding of the claim language with regarding the 112, 2nd paragraph rejection as mentioned above in paragraph 5 of this office action, claims 9-11, 14-18 and 21-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marquiss (US-4,385,210).

Regarding claims 9, 14, 25 and 28-29, Marquiss discloses a loudspeaker component comprising: a first surface layer (61); a second layer (61) fixed to the first layer so as to defined a core (62) and a margin (12); and sound damping material disposed in the core (62), wherein the core is completely encased by the first layer and the second layer (Fig. 5), both layers and sound damping material comprise a three-layer laminate as claimed. But Marquiss does not clearly teach a first flange and a second flange as claimed. Since Marquiss does clearly teach that the

loudspeaker component is mounted into an acoustic system with mounting means (55, 60), it therefore would have been obvious to one skilled in the art at the time the invention was made to provide any mounting or engaging means, such as a plurality of flange for the loudspeaker component as an alternate choice, in order to utilize the loudspeaker component.

Regarding claims 10 and 26, Marquiss does not clearly teach that the core defines a trapezoid as claimed. Since Marquiss does not restrict the shape of the loudspeaker component, it therefore would have been obvious to one skilled in the art at the time the invention was made to provide the loudspeaker component in any suitable shape with any desirable acoustic characteristics for different applications.

Regarding claims 11 and 27, Marquiss further discloses the loudspeaker component, wherein the margin is a solid structure (12).

Regarding claim 15, Marquiss further discloses the loudspeaker component, wherein the first layer, the sound damping material, and the second layer comprise a no more than three-layer laminate (Fig. 5).

Regarding claims 16-18, Marquiss further discloses the loudspeaker component, wherein the sound damping material comprises a solid material (col. 9, lines 32-39) as claimed.

Regarding claims 21-22, Marquiss does not clearly teach a thickness for each layer as claimed. Since Marquiss does not restrict the thickness and dimension for any layer, it therefore would have been obvious to one skilled in the art at the time the invention was made to provide any desirable thickness and dimension, such as 0,125 inch, for each layer for the loudspeaker component as an alternate choice, in order to utilize the loudspeaker component and to meet certain acoustic characteristic requirement.

Regarding claims 23-24 and 30, Marquiss further discloses the loudspeaker component, wherein the three-layer laminate defines a thickness that is substantially constant throughout the margin (59) and the three-layer laminate (Fig. 5) and the first layer is one of a plurality of materials as claimed (col. 9, lines 32-48).

10. Based on the best understanding of the claim language with regarding the 112, 2nd paragraph rejection as mentioned above in paragraph 5 of this office action, claims 9, 20-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pfeiderer (US-4,821,330).

Regarding claims 9 and 25, Pfeiderer disclose a loudspeaker component comprising: a first surface layer (6); a second layer (6) fixed to the first layer so as to defined a core (Fig. 16e) and a margin (1-2 or 3); and sound damping material disposed in the core (col. 9, lines 26-51), wherein the core is completely encased by the first layer and the second layer (Fig. 16e), both layers and sound damping material comprise a three-layer laminate as claimed. But Pfeiderer does not clearly teach a first and second flanges as claimed. Since Pfeiderer does clearly teach that the loudspeaker component is mounted into an acoustic system with mounting means (Figs. 7 and 16e), it therefore would have been obvious to one skilled in the art at the time the invention was made to provide any mounting or engaging means, such as a function flange for the loudspeaker component as an alternate choice, in order to utilize the loudspeaker component.

Regarding claim 20, Pfeiderer further disclose the loudspeaker component, wherein the sound damping material comprises balsa wood (col. 9, line 45).

Regarding claims 21-22, Pfeiderer does not clearly teach a thickness for each layer as claimed. Since Pfeiderer does not restrict the thickness and dimension for any layer, it therefore would have been obvious to one skilled in the art at the time the invention was made to provide

any desirable thickness and dimension, such as 0,125 inch, for each layer for the loudspeaker component as an alternate choice, in order to utilize the loudspeaker component and to meet certain acoustic characteristic requirement.

Regarding claims 23-24, Pfleiderer further discloses the loudspeaker component, wherein the three-layer laminate defines a thickness that is substantially constant throughout the margin and the three-layer laminate (Fig. 16e), and the first layer is one of a plurality of materials as claimed (col. 9, lines 26-51).

Response to Amendment

11. Applicant's arguments dated 12/27/2001 have been fully considered, but they are not deemed to be persuasive.

Regarding claim 6, the cited reference (US-5,519,178) does clearly show "a sealed core region" (126) sealed by a resin sealer (140) (col. 6, lines 41-55) as claimed.

Regarding claim 6 again, the cited reference (US-4,807,294) does clearly show that a core layer (3, a flat driver) of sound-damping material (8) is completely sealed or embedded into a molding material panel (2), wherein the panel (2) has at least two layers to form a sealed core region, and the core layer is embedded in the sealed core region (Figs. 1-2) as claimed.

Conclusion

12. **THIS ACTION IS MADE FINAL.** See M.P.E.P. § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT

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MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R. § 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION.

13. Any response to this final action should be mailed to:

**Commissioner of Patents and Trademarks
Washington, D.C. 20231**

Or faxed to:

(703) 308-9051, (for formal communications; please mark "EXPEDITED PROCEDURE"), or

(703) 305-9508, (for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to:

**Receptionist, Sixth Floor,
Crystal Park II,
2121 Crystal Drive,
Arlington, Virginia 22202**

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Suhan Ni** whose telephone number is **(703)-308-9322**, and the number for fax machine is **(703)-305-9508**. If it is necessary, the examiner's supervisor, **Curtis Kuntz**, can be reached at **(703) 305-4708**.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the group receptionist whose telephone number is **(703) 305-3900**.

SN

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February 18, 2002


HUYEN LE
PRIMARY EXAMINER